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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,008	07/18/2005	Hartmut Rudmann	FRG-16141	9028
40854 7590 11/12/2008 RANKIN, HILL, & CLARK LLP 38210 Glenn Avenue WILLOUGHBY, OH 44094-7808				
EXAMINER				
SIDDIQUE, OMAR F				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
11/12/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/541,008

**Applicant(s)**

RUDMANN ET AL.

**Examiner**

OMAR SIDDIQUE

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 6-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-5 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 6/28/2005

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of group 1 claims 1-5 and 17 in the reply filed on 10/03/2008 is acknowledged.
2. Claims 6-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group of claims, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/03/2008.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-2 and 17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 and 18 of

copending Application No. 11943472. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application teaches the use of a replication tool with negatives and a spacer. Further the copending application teaches the placement of a replication material between the replication tool and a substrate and to close the two (replication tool and substrate) providing pressure on the material. Additionally, the copending application teaches the hardening of the material and removal from the mold. The copending claim fails to address the state of the replication material (plastically deformable, viscous, or liquid) but it would have been obvious to one of ordinary skill in the art to have the replication material in one of these softened states to allow for the proper use of the replication tool. Furthermore, the copending application teaches the hardening of the material further indicating that the material is initially in some softened state.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1-2 and 17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 11/384,537. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application teaches the use of a replication tool with negatives and a spacer. Further the copending application teaches the placement of a replication material between the replication tool and a substrate and to close the two (replication tool and substrate) providing pressure on the

material. Additionally, the copending application teaches the hardening of the material. The copending claim further teaches the state of the replication material as plastically deformable, viscous, or liquid. The copending application fails to teach the removal of the product after it has been hardened, however it would have been obvious to one of ordinary skill in the art to remove the product after it was hardened and completed, so the product could be packaged and made ready for sale.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-2, 4-5, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bacher et al, U.S. Patent No. 5,543,108, and further in view of Uytterhaeghe et al, U.S. Patent No. 6,231,094.

With regard to claims 1-2, 4, and 17, Bacher teaches a method of making a microstructure body; much like the applicant however fails to mention the use of a replication tool with a spacer and negative. Uytterhaeghe teaches a mold/replication tool (12) which has a spacer, and negative/recession (far left and right of mold). Therefore the use of replication tools with both spacers and negatives was well known in the art of molding at the time of the applicant's invention. Furthermore, Bacher states in column 2, lines 30-45; the shape of the microstructure body is not important, the bodies can be rectangular, pyramidal, frustoconical, or stepped. Therefore it would have been obvious to use a replication tool similar to Uytterhaeghe's because it was well known at the time of the invention to use tools/molds with both spacers and negatives in the art of molding, and the replication tool would provide a different shaped microstructure, which would increase the range of products manufactured by the Bacher process. Bacher teaches a preliminary product having a **material in a liquid state** (column 3, lines 32-35). Bacher teaches bringing the material component in contact with said replication surface while the **spacer portion abuts** against a stop surface (Figure 1). Bacher also teaches cooling the thermoplastic material, **hardening it** and **removing it** from the mold (column 3, lines 37-40).

With regard to claim 5, Bacher teaches an **injection molding** process (column 3, lines 30-46).

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bacher et al, U.S. Patent No. 5,543,108, and further in view of Uytterhaeghe et al, U.S. Patent No. 6,231,094 and Lu, U.S. Patent No. 5,183,597.

With regards to claim 3, Bacher teaches a plastic material (10) being the material component, however fails to explicitly mention the type of plastic material. Lu teaches a method of making microstructure composites, and teaches the use of oligomeric resins, in particular he mentions epoxy as a possible resin of choice (column 3, lines 17-23). It would have been obvious to one of ordinary skill in the art to use epoxy as the plastic material mentioned by Bacher, because he fails to mention a specific plastic material, and it was known (at the time of the invention) In the art of molding microstructures to use epoxy resin.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMAR SIDDIQUE whose telephone number is (571)270-5515. The examiner can normally be reached on Monday-Friday 9AM-5AM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 1-571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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